



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

October 22, 2003

Serial No. 09/851,627  
Applicant: Richard B. Pitbladdo  
Filed: May 9, 2001  
Title: Sheet Glass Forming Apparatus  
Art Unit: 1731  
Examiner: Vincent, Sean E  
Confirmation Number: 4080  
Attorney Docket No.: PIT-1

HONORABLE COMMISSIONER OF PATENTS  
Washington, D.C. 20231

AMENDMENT  
AND RESPONSE TO OFFICE ACTION

In response to the Office Action dated June 23, 2003, please amend the above-identified application as follows:

**Amendments to the Specification** begin on page 2 of this paper.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 4 of this paper.

**Amendments to the Drawings** begin on page 19 of this paper and include attached replacement sheets.

**Remarks/Arguments** begin on page 20 of this paper.

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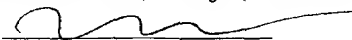
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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited in the U.S. Postal Service as Certified Mail No. 702 05602005 09851627 with a return receipt requested, in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231 on .

  
Justin Wood

### **Amendments to the Specification:**

Pursuant to 37 C.F.R. § 1.121(b) kindly amend the specification as follows. Amendments to the specification are made by presenting replacement paragraphs or sections marked up to show changes made relative to the immediate prior version. The changes in any amended paragraph or section are being shown by strikethrough (for deleted matter) or underlined (for added matter).

Please replace the title on page 1, line 1 with the following title:

### **OVERFLOW DOWNDRAWSHEET GLASS FORMING METHOD AND APPARATUS**

Please replace the paragraph on page 1, lines 12-13 with the following paragraph at page 1, line 12:

4) Provisional Application Number 60/219,902, filed July 21, 2000, entitled "SHEET GLASS FORMING APPARATUS";

Please replace the paragraph on page 10, lines 10-22, with the following paragraph at page 10, line 10:

The forming apparatus shown in Figures 2a-2d has straight sloped weirs (5) that are close to parallel with the pointed edge of the wedge shaped portion of the forming apparatus (1) but sloped slightly downward in the direction away from the inflow pipe (3). Glass (2) enters the trough (4) through an inflow pipe (3). The bottom and sides of the trough (4) are contoured in a manner to provide even distribution of glass to the top of each side weir (5). The major portion of the glass (2) then flows over the top of each side weir (5), down each side of the wedge shaped portion of the forming apparatus (1), and joins at the bottom of the wedge to form a sheet of molten glass (2). The molten glass (2) is then cooled to form a solid glass sheet of substantially uniform thickness. A small portion of the glass (22) passes through the forming trough (4) and out the far end through an overflow device (10). The overflow device (10) incorporated at the far end of the trough (4) is used in conjunction with tilting of the apparatus

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(1), changes in glass flow rate, and changes in glass viscosity to regulate the thickness profile of the sheet.

Please replace the paragraph on page 11, lines 2-12 with the following paragraph at page 11, line 2:

Operational adjustment of any wedge or curvature in the sheet thickness may be effected by tilting the apparatus (1) and by varying the portion of glass (22) flowing to the overflow device (10). For instance, if the glass (2) at the far end is thinner than at the inlet end, lowering the far end will flow more glass (2) to that end, consequently thickening the sheet at the far end. Conversely, increasing the portion of glass (22) flowing to the overflow (10) will decrease the glass thickness at the far end of the forming apparatus. Since the two effects are nonlinear, different combinations of tilt and overflow glass can produce corrections in both curvature and in wedge. This will allow for a longer production campaign with a given forming apparatus, thus reducing manufacturing down time with a resultant cost saving.